UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|---|---|---|---|
| 10/011,011 | 11/19/2001 | Francisco Sureda | 14XZ00088 | 7584 |

23413 7590 11/26/2007

CANTOR COLBURN, LLP
55 GRIFFIN ROAD SOUTH
BLOOMFIELD, CT 06002

| EXAMINER | |
|---|---|
| ALHIJA, SAIF A | |

| ART UNIT | PAPER NUMBER |
|---|---|
| 2128 | |

| MAIL DATE | DELIVERY MODE |
|---|---|
| 11/26/2007 | PAPER |

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

| Office Action Summary | Application No. | Applicant(s) | |
|---|---|---|---|
| | 10/011,011 | SUREDA ET AL. | |
| | Examiner | Art Unit | |
| | Saif A. Alhija | 2128 | |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☒ Responsive to communication(s) filed on *20 August 2007*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) *2-55,57,59 and 60* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *2-55,57,59 and 60* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *19 November 2002* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

## *DETAILED ACTION*

1. Claims 2-55, 57, and 59-60 have been presented for examination.

Claims 56 and 61-63 have been cancelled.

### *Response to Arguments*

2. Applicant's arguments with respect to claim **2-55, 57, and 59-60** have been considered but are moot in view of the new ground(s) of rejection.

i) Applicants amendments necessitated the 103 rejections provided below.

ii) Following Applicants amendments the 112 2nd rejections are withdrawn.

iii) In order to support Applicants claim to the submitted priority document, Applicants are respectfully requested to map Applicants amendments to the specification of the foreign priority document.

iv) Examiner has cited particular columns and line numbers in the references applied to the claims for the convenience of the applicant. Although the specified citations are representative of the teachings of the art and are applied to specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested from the applicant in preparing responses, to fully consider the references in their entirety as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the Examiner.

v) The Examiner respectfully requests, in the event the Applicants choose to amend or add new claims, that such claims and their limitations be directly mapped to the specification, which provides support for the subject matter. This will assist in expediting compact prosecution.

vi) Further, the Examiner respectfully encourages Applicants to direct the specificity of their response with regards to this office action to the broadest reasonable interpretation of the claims as presented. This will avoid issues that would delay prosecution such as limitations not explicitly presented in the claims, intended use statements that carry no patentable weight, mere allegations of patentability, and novelty that is not clearly expressed.

### *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

3. **Claim(s) 2-55, 57, and 59-60** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Haridas et al, Medical Device and Diagnostic Industry Magazine "Predictive Analysis at the Forefront of Medical Product Development"**, hereafter referred to as **Haridas** in view of **Gorman et al. "Simulation and Virtual Reality in Surgical Eduction", hereafter Gorman.**

4. **Claim(s) 2-55, 57, and 59-60** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Haridas et al, Medical Device and Diagnostic Industry Magazine "Predictive Analysis at the Forefront of Medical Product Development"**, hereafter referred to as **Haridas** in view of **Gross "Computer Graphics in Medicine: From Visualization to Surgery Simulation", hereafter Gross.**

**Regarding Claim 57:**

**Haridas discloses A** system to simulate in the course of an actual interventional operation, in order to ensure a desired result of the actual interventional operation, the diameter enlargement of a lesion of a blood vessel comprising:

means for providing an endovascular prosthesis; **(Page 4, "What If" Material Sensitivity Studies. Page 5, Paragraph 1. Page 6, Paragraphs 1-2. Figure 7-10)**

means for providing a computer equipped with data storage; **(Page 4, "What If" Material Sensitivity Studies. Page 5, Paragraph 1. Page 6, Paragraphs 1-2. Figure 7-10)**

means for processing and display; **(Page 4, "What If" Material Sensitivity Studies. Page 5, Paragraph 1. Page 6, Paragraphs 1-2. Figure 7-10)**

means for visualizing a three-dimensional simulated image showing the result of interaction between the lesion and a simulated endovascular prosthesis after simulated deployment of the simulated endovascular prosthesis, the three-dimensional simulated image being obtained by superposition of two three-dimensional images; **(Page 4, "What If" Material Sensitivity Studies. Page 5, Paragraph 1. Page 6, Paragraphs 1-2. Figure 7-10)**

and the means for providing a computer being optionally connected to a means for display; **(Page 4, "What If" Material Sensitivity Studies. Page 5, Paragraph 1. Page 6, Paragraphs 1-2. Figure 7-10)**

means for interventionally deploying the endovascular prosthesis in the blood vessel at the lesion in the course of the interventional operation; **(Page 4, "What If" Material Sensitivity Studies. Page 5, Paragraph 1. Page 6, Paragraphs 1-2. Figure 7-10)**

means for determining during the actual interventional operation a composition of the lesion; **(Page 4, "What If" Material Sensitivity Studies. Page 5, Paragraph 1. Page 6, Paragraphs 1-2. Figure 7-10)**

means for taking into account the instantaneous state of the endovascular prosthesis and shape of the lesion in order to further simulate and visualize in three dimensions a future state of the endovascular prosthesis and of the lesion as a function of possible actions indicated by an operator; **(Page 4, "What If" Material Sensitivity Studies. Page 5, Paragraph 1. Page 6, Paragraphs 1-2. Figure 7-10)**

thereby enabling in the course of the actual interventional operation, to take the present stage of operational parameters into account so that a simulated final state of the actual interventional operation can be visualized. **(Page 4, "What If" Material Sensitivity Studies. Page 5, Paragraph 1. Page 6, Paragraphs 1-2. Figure 7-10)**

**Applicants amendments recite an actual interventional operation and simulation based on the actual interventional operation.**

**Haridas does not explicitly disclose** in response to the interventionally deployed endovascular prosthesis and the determined lesion composition during intervention.

**However Gorman discloses** an actual interventional operation and simulation based on the actual interventional operation. **(Gorman. Page 1204, Simulation, Paragraph 2, real time simulation. Page 1205, Image Guidance. Page 1206, Telesurgery.)**

**However Gross also discloses** an actual interventional operation and simulation based on the actual interventional operation. **(Gross. Page 55, Data Acquisition and Analysis)**

It would have been obvious at the time of the invention to utilize the graphical simulation of an operation discussed in **Gorman or Goss** with the prosthesis simulation in **Haridas** in order to allow for **"fully interactive and immersive surgery simulation" (Gross, Abstract)** as well as **"training in visuospatial tasks" (Gorman, Page 1205, Left Column, Paragraph 3) and further to promote safer more precise surgery practice.**

**Regarding Claims 59 and 60:**

See rejection for claim 57 above.

**Regarding Claim 2:**

**Haridas discloses** Method according to claim 59, wherein the two three-dimensional images comprise a first three-dimensional simulated image showing the endovascular prosthesis deployed, taking into account the resistance of the lesion, and a second three-dimensional simulated image showing the enlarged lesion following the deployment of the endovascular prosthesis. **(Page 4, "What If" Material Sensitivity Studies. Page 6, Figure 8)**

**Regarding Claim 3:**

**Haridas discloses** Method according to claim 2, wherein the first three-dimensional simulated image showing the endovascular prosthesis deployed is obtained from a model of the implant. **(Page 4, "What If" Material Sensitivity Studies. Page 6, Figure 8)**

**Regarding Claim 4:**

**Haridas discloses** Method according to claim 3, wherein the model of the implant is obtained from the mechanical characteristics of the prosthesis or from characteristics of the prosthesis and a three-dimensional image of the contracted prosthesis. **(Page 4, "What If" Material Sensitivity Studies. Page 6, Figure 8)**

**Regarding Claim 5:**

**Haridas discloses** Method according to one of claim 2, wherein the second three-dimensional simulated image showing the enlarged lesion is obtained from a model of the lesion. **(Page 4, "What If" Material Sensitivity Studies. Page 6, Figure 8)**

**Regarding Claim 6:**

**Haridas discloses** Method according to one of claim 3, wherein the second three-dimensional simulated image showing the enlarged lesion is obtained from a model of the lesion. **(Page 4, "What If" Material Sensitivity Studies. Page 6, Figure 8)**

**Regarding Claim 7:**

**Haridas discloses** Method according to one of claim 4, wherein the second three-dimensional simulated image showing the enlarged lesion is obtained from a model of the lesion. **(Page 4, "What If" Material Sensitivity Studies. Page 6, Figure 8)**

**Regarding Claim 8:**

**Haridas discloses** Method according to claim 2, wherein the model of the lesion is obtained from the composition and biomechanical properties of the blood vessels and surrounding atheromatous plaques and from a three-dimensional image of the lesion. **(Page 6, Paragraph 2)**

**Regarding Claim 9:**

**Haridas discloses** Method according to claim 3, wherein the model of the lesion is obtained from the composition and biomechanical properties of the blood vessels and surrounding atheromatous plaques and from a three-dimensional image of the lesion. **(Page 6, Paragraph 2)**

**Regarding Claim 10:**

**Haridas discloses** Method according to claim 4, wherein the model of the lesion is obtained from the composition and biomechanical properties of the blood vessels and surrounding atheromatous plaques and from a three-dimensional image of the lesion. **(Page 6, Paragraph 2)**

**Regarding Claim 11:**

**Haridas discloses** Method according to claim 5, wherein the model of the lesion is obtained from the composition and biomechanical properties of the blood vessels and surrounding atheromatous plaques and from a three-dimensional image of the lesion. **(Page 6, Paragraph 2)**

**Regarding Claim 12:**

**Haridas discloses** Method according to claim 3, wherein, for particular parameters concerning the deployment technique, the lesion and the vascular prosthesis, the biomechanical properties of the lesion are taken into account to execute the model of the prosthesis in order to obtain a three-dimensional image of the prosthesis deployed, and then to execute the model of the lesion in order to obtain a three-dimensional image of the enlarged lesion. **(Page 6, Paragraphs 1-2)**

**Regarding Claim 13:**

**Haridas discloses** Method according to claim 4, wherein, for particular parameters concerning the deployment technique, the lesion and the vascular prosthesis, the biomechanical properties of the lesion are taken into account to execute the model of the prosthesis in order to obtain a three-dimensional image of the prosthesis deployed, and then to execute the model of the lesion in order to obtain a three-dimensional image of the enlarged lesion. **(Page 6, Paragraphs 1-2)**

**Regarding Claim 14:**

**Haridas discloses** Method according to claim 5, wherein, for particular parameters concerning the deployment technique, the lesion and the vascular prosthesis, the biomechanical properties of the lesion are taken into account to execute the model of the prosthesis in order to obtain a three-dimensional image of the prosthesis deployed, and then to execute the model of the lesion in order to obtain a three-dimensional image of the enlarged lesion. **(Page 6, Paragraphs 1-2)**

**Regarding Claim 15:**

**Haridas discloses** Method according to claim 6, wherein, for particular parameters concerning the deployment technique, the lesion and the vascular prosthesis, the biomechanical properties of the lesion are taken into account to execute the model of the prosthesis in order to obtain a three-dimensional image of the prosthesis deployed, and then to execute the model of the lesion in order to obtain a three-dimensional image of the enlarged lesion. **(Page 6, Paragraphs 1-2)**

**Regarding Claim 16:**

**Haridas discloses** Method according to claim 7, wherein, for particular parameters concerning the deployment technique, the lesion and the vascular prosthesis, the biomechanical properties of the lesion are taken into account to execute the model of the prosthesis in order to obtain a three-dimensional image of the prosthesis deployed, and then to execute the model of the lesion in order to obtain a three-dimensional image of the enlarged lesion. **(Page 6, Paragraphs 1-2)**

**Regarding Claim 17:**

**Haridas discloses** Method according to claim 8, wherein, for particular parameters concerning the deployment technique, the lesion and the vascular prosthesis, the biomechanical properties of the lesion are taken into account to execute the model of the prosthesis in order to obtain a three-dimensional image of the prosthesis deployed, and then to execute the model of the lesion in order to obtain a three-dimensional image of the enlarged

lesion. **(Page 6, Paragraphs 1-2)**

**Regarding Claim 18:**

**Haridas discloses** Method according to claim 9, wherein, for particular parameters concerning the deployment technique, the lesion and the vascular prosthesis, the biomechanical properties of the lesion are taken into account to execute the model of the prosthesis in order to obtain a three-dimensional image of the prosthesis deployed, and then to execute the model of the lesion in order to obtain a three-dimensional image of the enlarged lesion. **(Page 6, Paragraphs 1-2)**

**Regarding Claim 19:**

**Haridas discloses** Method according to claim 10, wherein, for particular parameters concerning the deployment technique, the lesion and the vascular prosthesis, the biomechanical properties of the lesion are taken into account to execute the model of the prosthesis in order to obtain a three-dimensional image of the prosthesis deployed, and then to execute the model of the lesion in order to obtain a three-dimensional image of the enlarged lesion. **(Page 6, Paragraphs 1-2)**

**Regarding Claim 20:**

**Haridas discloses** Method according to claim 3, wherein the model of the prosthesis is established as a function of the radial pressure and resistance forces on the mesh of the prosthesis. **(Page 5, Paragraph 1. Figure 7)**

**Regarding Claim 21:**

**Haridas discloses** Method according to claim 4, wherein the model of the prosthesis is established as a function of the radial pressure and resistance forces on the mesh of the prosthesis. **(Page 5, Paragraph 1. Figure 7)**

**Regarding Claim 22:**

**Haridas discloses** Method according to claim 5, wherein the model of the prosthesis is established as a function of the radial pressure and resistance forces on the mesh of the prosthesis. **(Page 5, Paragraph 1. Figure 7)**

**Regarding Claim 23:**

**Haridas discloses** Method according to claim 6, wherein the model of the prosthesis is established as a function of the radial pressure and resistance forces on the mesh of the prosthesis. **(Page 5, Paragraph 1. Figure 7)**

**Regarding Claim 24:**

**Haridas discloses** Method according to claim 7, wherein the model of the prosthesis is established as a function of the radial pressure and resistance forces on the mesh of the prosthesis. **(Page 5, Paragraph 1. Figure 7)**

**Regarding Claim 25:**

**Haridas discloses** Method according to claim 8, wherein the model of the prosthesis is established as a function of the radial pressure and resistance forces on the mesh of the prosthesis. **(Page 5, Paragraph 1. Figure 7)**

**Regarding Claim 26:**

**Haridas discloses** Method according to claim 9, wherein the model of the prosthesis is established as a function of the radial pressure and resistance forces on the mesh of the prosthesis. **(Page 5, Paragraph 1. Figure 7)**

**Regarding Claim 27:**

**Haridas discloses** Method according to claim 10, wherein the model of the prosthesis is established as a function of the radial pressure and resistance forces on the mesh of the prosthesis. **(Page 5, Paragraph 1. Figure 7)**

**Regarding Claim 28:**

**Haridas discloses** Method according to claim 11, wherein the model of the prosthesis is established as a function of the radial pressure and resistance forces on the mesh of the prosthesis. **(Page 5, Paragraph 1. Figure 7)**

**Regarding Claim 29:**

**Haridas discloses** Method according to claim 12, wherein the model of the prosthesis is established as a function of the radial pressure and resistance forces on the mesh of the prosthesis. **(Page 5, Paragraph 1. Figure 7)**

**Regarding Claim 30:**

**Haridas discloses** Method according to claim 13, wherein the model of the prosthesis is established as a function of the radial pressure and resistance forces on the mesh of the prosthesis. **(Page 5, Paragraph 1. Figure 7)**

**Regarding Claim 31:**

**Haridas discloses** Method according to claim 14, wherein the model of the prosthesis is established as a function of the radial pressure and resistance forces on the mesh of the prosthesis. **(Page 5, Paragraph 1. Figure 7)**

**Regarding Claim 32:**

**Haridas discloses** Method according to claim 15, wherein the model of the prosthesis is established as a function of the radial pressure and resistance forces on the mesh of the prosthesis. **(Page 5, Paragraph 1. Figure 7)**

**Regarding Claim 33:**

**Haridas discloses** Method according to claim 16, wherein the model of the prosthesis is established as a function of the radial pressure and resistance forces on the mesh of the prosthesis. **(Page 5, Paragraph 1. Figure 7)**

**Regarding Claim 34:**

**Haridas discloses** Method according to claim 17, wherein the model of the prosthesis is established as a function of the radial pressure and resistance forces on the mesh of the prosthesis. **(Page 5, Paragraph 1. Figure 7)**

**Regarding Claim 35:**

**Haridas discloses** Method according to claim 18, wherein the model of the prosthesis is established as a function of the radial pressure and resistance forces on the mesh of the prosthesis. **(Page 5, Paragraph 1. Figure 7)**

**Regarding Claim 36:**

**Haridas discloses** Method according to claim 5, wherein the model of the lesion is established by means of the finite-element method. **(Page 5, Paragraph 1. Figure 7)**

**Regarding Claim 37:**

**Haridas discloses** Method according to claim 6, wherein the model of the lesion is established by means of the finite-element method. **(Page 5, Paragraph 1. Figure 7)**

**Regarding Claim 38:**

**Haridas discloses** Method according to claim 7, wherein the model of the lesion is established by means of the finite-element method. **(Page 5, Paragraph 1. Figure 7)**

**Regarding Claim 39:**

**Haridas discloses** Method according to claim 8, wherein the model of the lesion is established by means of the finite-element method. **(Page 5, Paragraph 1. Figure 7)**

**Regarding Claim 40:**

**Haridas discloses** Method according to claim 9, wherein the model of the lesion is established by means of the finite-element method. **(Page 5, Paragraph 1. Figure 7)**

**Regarding Claim 41:**

**Haridas discloses** Method according to claim 10, wherein the model of the lesion is established by means of the finite-element method. **(Page 5, Paragraph 1. Figure 7)**

**Regarding Claim 42:**

**Haridas discloses** Method according to claim 11, wherein the model of the lesion is established by means of the finite-element method. **(Page 5, Paragraph 1. Figure 7)**

**Regarding Claim 43:**

**Haridas discloses** Method according to claim 12, wherein the model of the lesion is established by means of the finite-element method. **(Page 5, Paragraph 1. Figure 7)**

**Regarding Claim 44:**

**Haridas discloses** Method according to claim 13, wherein the model of the lesion is established by means of the finite-element method. **(Page 5, Paragraph 1. Figure 7)**

**Regarding Claim 45:**

**Haridas discloses** Method according to claim 14, wherein the model of the lesion is established by means of the finite-element method. **(Page 5, Paragraph 1. Figure 7)**

**Regarding Claim 46:**

**Haridas discloses** Method according to claim 15, wherein the model of the lesion is established by means of the finite-element method. **(Page 5, Paragraph 1. Figure 7)**

**Regarding Claim 47:**

**Haridas discloses** Method according to claim 16, wherein the model of the lesion is established by means of the finite-element method. **(Page 5, Paragraph 1. Figure 7)**

**Regarding Claim 48:**

**Haridas discloses** Method according to claim 17, wherein the model of the lesion is established by means of the finite-element method. **(Page 5, Paragraph 1. Figure 7)**

**Regarding Claim 49:**

**Haridas discloses** Method according to claim 18, wherein the model of the lesion is established by means of the finite-element method. **(Page 5, Paragraph 1. Figure 7)**

**Regarding Claim 50:**

**Haridas discloses** Method according to claim 19, wherein the model of the lesion is established by means of the finite-element method. **(Page 5, Paragraph 1. Figure 7)**

**Regarding Claim 51:**

**Haridas discloses** Method according to claim 20, wherein the model of the lesion is established by means of the finite-element method. **(Page 5, Paragraph 1. Figure 7)**

**Regarding Claim 52:**

**Haridas discloses** Method according to claim 21, wherein the model of the lesion is established by means of the finite-element method. **(Page 5, Paragraph 1. Figure 7)**

**Regarding Claim 53:**

**Haridas discloses** Method according to claim 22, wherein the model of the lesion is established by means of the finite-element method. **(Page 5, Paragraph 1. Figure 7)**

**Regarding Claim 54:**

**Haridas discloses** Method according to claim 23, wherein the model of the lesion is established by means of the finite-element method. **(Page 5, Paragraph 1. Figure 7)**

**Regarding Claim 55:**

**Haridas discloses** Method according to claim 24, wherein the model of the lesion is established by means of the finite-element method. **(Page 5, Paragraph 1. Figure 7)**

***Conclusion***

**5.** Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

**6.** All Claims are rejected.

**7.** Any inquiry concerning this communication or earlier communications from the examiner should be directed to Saif A. Alhija whose telephone number is (571) 272-8635. The examiner can normally be reached on M-F, 11:00-7:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kamini Shah can be reached on (571) 272-22792279. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

KAMINI SHAH
SUPERVISORY PATENT EXAMINER

SAA

November 15, 2007